For Research Use Only

## CoraLite® Plus 647-conjugated IRAK1 Polyclonal antibody



Catalog Number: CL647-10478

**Featured Product** 

**Basic Information** 

Catalog Number:

CL647-10478 BC014963 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 3654

Nanodrop: **UNIPROT ID:** P51617 Rabbit Full Name:

Isotype: interleukin-1 receptor-associated

IgG kinase 1

Immunogen Catalog Number: Calculated MW: AG0728 77 kDa

> Observed MW: 68-80 kDa

GenBank Accession Number:

**Tested Applications:** IF/ICC, FC (Intra)

**Purification Method:** Antigen affinity purification

Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

**Applications** 

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC : HeLa cells,

## **Background Information**

Interleukin-1 receptor-associated kinases (IRAKs) are a unique family of death domain containing protein kinases  $that play \ a \ key \ role \ in \ initiating \ innate \ immune \ response \ against \ for eign \ pathogens. \ They \ are \ involved \ in \ Toll-like$ receptor (TLR) and interleukin-1 receptor (IL-1R) signaling pathways. IRAK1 is the first member of this kinase family. Upon ligand binding to TLR/IL-1R, IRAK1 is recruited by MYD88 to the receptor-signaling complex, the association leads to IRAK1 phosphorylation by IRAK4 and subsequent autophosphorylation and kinase activation. Hyperphosphorylated IRAK1 then disengages from the receptor complex, and forms a cytosolic IRAK1-TRAF6 complex. TRAF6 then interacts with TAK and TAB, resulting in eventual activation of the NF-кB and MAPK pathways. Phosphorylated IRAK1 also undergoes ubiquitin-mediated degradation or sumoylation, which results in nuclear translocation and transcriptional activation of inflammatory target genes. (PMID: 17890055; 12620219)

Storage

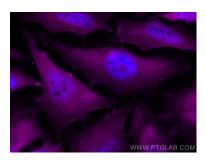
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

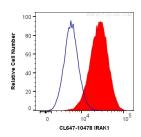
Aliquoting is unnecessary for -20°C storage

in USA), or 1(312) 455-8498 (outside USA)

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® Plus 647 IRAK1 antibody (CL647-10478) at dilution of 1:200.



1X10^6 HeLa cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human IRAK1 (CL647-10478) (red), or 0.2 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).